#### 29. PAVONIA ILIONEUS, Cramer.

This is a widely distributed species in Tropical America. I find no difference worthy of note between Amazonian, Bogota, and Panama examples.

#### 30. PAVONIA AUTOMEDON, Cramer.

Also a widely distributed species, reaching as far south as Bahia in Brazil. The single Panama example does not differ from those taken by myself in the Amazons region.

## 31. Euptychia ocyrrhoë, Fabricius.

This small and weak-flying insect is also widely distributed, and appears to remain constant in its specific characters.

# 2. Observations on Australian Tree-Frogs living in the Society's Menagerie. By Dr. A. Günther.

## (Plate XXX.)

The only Australian Batrachian which, to my knowledge, has until lately been exhibited in the Society's menagerie is Pelodryas cæruleus (Hyla cærulea, White), a specimen of which, almost unobserved, lived there for two or three years. In the beginning of the spring of this year, however, an opportunity was taken of procuring eight specimens, which were imported by a collector from New South Wales, and which belonged to four species, viz. to Pelodryas cæruleus, Hyla peronii, Hyla krefftii, and to an apparently undescribed form, which we shall name Hyla phyllochroa. Having had opportunity of observing these for some time in the Gardens in the Regent's Park, as well as at my own house, I may make the following remarks. In general, I was surprised to find a great similarity in their habits with those of our common European Tree-frog. They sleep during the day, squatting in a corner, generally selecting a place in which they are hidden from view, but easily roused on the approach of some insect, which they seize with their tongue. When the prey is large, or when they have accidentally seized a small piece of wood, &c., together with the insect, they use their fore foot to push the insect into the mouth, or to remove the object which is unfit for food. They never enter the water during the summer months, and tried to escape from a tank when put into it. They leave their hidingplaces towards dusk, becoming very lively, apparently less with the object of obtaining food (which they can only procure by quietly remaining in wait for it) than with that of enjoying themselves; and Pelodryas cæruleus, which is endowed with a voice, indulged every evening in a musical performance. They became more quiet after midnight, and at sunrise they had settled down at some restingplace, sometimes one individual choosing the same place for several consecutive days. They preferred bluebottle flies to every other insect, and never touched ants or black beetles. Pelodryas cæruleus

feeds freely on meal-worms when other food is scarce; but they are frequently vomited, and I doubt whether these frogs could be kept in good health if restricted to this particular kind of food. In all these points the Australian species mentioned agree with the European Tree-frog, and I need hardly say that they as easily climb

smooth surfaces, glass, &c., as the latter species.

Pelodryas cæruleus, White (Günth. Batr. Sal. pl. 9. fig. B).-The natural colour of this species is a light grass-green, which, when the animal is kept in the dark or in a very wet place, changes into dark sap-green; roundish yellowish-white spots are sometimes scattered on the sides. I have mentioned above that it has a voice, which is a kind of grunting, somewhat resembling that of Rana esculenta, but lower. I must remark, however, that the two examples in the menagerie, a male and female, are evidently not full-grown; and I was rather surprised to hear a voice at all from the male, as in Hyla viridis the vocal sac and the voice are not developed before the individual has attained to maturity and to its full size. The hind limbs are comparatively short, and therefore this species cannot make such wide jumps as the true Hylx. I could not observe any secretion from the parotoid glands, which are so much developed in full-sized individuals, but which are scarcely perceptible in our specimens. These Frogs soon became familiar, especially the male, which, when I went to feed them, used to approach and to watch the opening through which I introduced the flies into their cage.

Hyla peronii, Bibron (Plate XXX. figs. A, B, a).—This species is very remarkable on account of the change of its colours. When awake (see fig. A) it is brownish olive, covered all over with blackish-brown spots, between which small green dots are scattered; the anterior and posterior sides of the thigh and the loin are bright yellow, with irregular reticulated black spots. The pupil is open, horizontally elliptic, and crossed by a very distinct blackish vertical band. We have given a second figure of the same individual (fig. B) when asleep: the dark spots disappear entirely, the ground-colour becomes lighter, sometimes even lighter than it is indicated in the figure; the green dots are very indistinct, and the numerous tubercles with which the skin is covered are whitish at the top. The pupil is contracted into a minute square opening, from which four black lines radiate.

This species is very nimble in its motions, making great leaps when pursued, and darting after flies from 8 to 10 inches distant; but it frequently misses its aim in these attempts. I have heard it emit a sound, but only when it was caught, and which I cannot otherwise describe except by comparing it with that emitted by

Hyla arborea under similar circumstances.

Hyla krefftii (Pl. XXX. fig. D).—A single specimen of this species, lately described by myself\*, being in the collection, I am enabled to give a description of the natural colours. A broad brown band commences between the eyes and extends to the vent, occupying the back almost entirely; it is lighter along the middle; another darkbrown band descends obliquely from the eye to the humeral pit;

<sup>\*</sup> Ann. & Mag. Nat. Hist. 1863, xi. p. 28, pl. 4. fig. C.

the sides are light reddish olive, and covered with minute brown dots, like the back. The hind part of the thigh is of a beautiful purple colour. This species changes the colours but little; but they appear darker and the markings more intense when the animal is awake than when asleep. Our specimen is much less greedy and less active than H. peronii, although it is not less slender, and makes leaps as long as the other species; it selects its hiding-place on the ground below some stones. I have not heard any voice from it; but I am not certain about its sex.

Hyla phyllochroa, n. sp. (Pl. XXX. figs. C, c).—Snout rather short, broad, with the canthus rostralis angular. The vomerine teeth form two very small groups, situated behind the level of the hinder edge of the inner nostrils. Tympanum distinct, much smaller than the eye. Tongue scarcely notched behind. Perfectly smooth above; belly granular; a fold across the chest. Fingers one-fourth webbed; the membrane between the toes does not extend to the terminal disk. Uniform green above, white below; a very narrow, slightly prominent black line, edged with yellow superiorly, runs from the eye, above the tympanum, to the side of the body, where it is lost.

Besides the living specimen in the Society's menagerie, I have examined three others in the British Museum (two from Sydney, received through Messrs. Cuming and Krefft, and one from Errumanga, New). This species possesses the faculty of changing its colours only in a slight degree; it is generally of a uniform light sap-green, which, under certain circumstances, becomes darker. I have not heard a voice from it. Those in the British Museum are females; the largest has the ovaria fully developed, and measures 17 lines from snout to vent; the hind leg 29 lines.

3. Note on the Occurrence of the European Sea-Eagle IN NORTH AMERICA. By P. L. SCLATER, M.A., Ph.D., F.R.S., SECRETARY TO THE SOCIETY.

It is well known that the European Sea-Eagle is found in Greenland. Professor J. Reinhardt, in his article on the Ornithology of Greenland, published in the 'Ibis' for 1861\*, states that it is "very common" in that country, occurring "in South Greenland all the year round, in North Greenland only in summer." But I am not aware that any instance is hitherto known of this Eagle having been met with on the continent of North America; indeed Professor Baird, in his 'Birds of North America,' states the contrary to be the case. I have therefore thought that it would be desirable to place on record a short statement of the facts which induce me to believe that the Haliaëtus albicillus is not merely an occasional visitant to the northern shores of North America, but even resides and breeds in that country.

In December 1861, Mr. A. W. Crichton deposited in the Society's

<sup>\* &</sup>quot;List of the Birds hitherto observed in Greenland," Ibis, 1861, p. 1.